

Proposed Mixed-Use Development

**62 Old Barrenjoey Road,
Avalon Beach**

TRAFFIC AND PARKING ASSESSMENT REPORT

11 August 2021

Ref 21178

TABLE OF CONTENTS

1. INTRODUCTION	1
2. PROPOSED DEVELOPMENT	5
3. TRAFFIC ASSESSMENT	12
4. PARKING ASSESSMENT	17

LIST OF ILLUSTRATIONS

Figure 1	Location
Figure 2	Site
Figure 3	Road Hierarchy
Figure 4	Existing Traffic Controls
Figure 5	Existing Parking Restrictions

1. INTRODUCTION

This report has been prepared to accompany a development application to Northern Beaches Council for a mixed-use development proposal to be located at 62 Old Barrenjoey Road, Avalon Beach (Figures 1 and 2).

The proposed development will involve the partial demolition of the existing retail premises on the site to facilitate the construction of a new mixed-use development with the addition of two residential apartments above a ground floor retail component.

The proposed development reduces the size of the existing retail premises, from 156m² down to 90m², a reduction of 66m² in floor area.

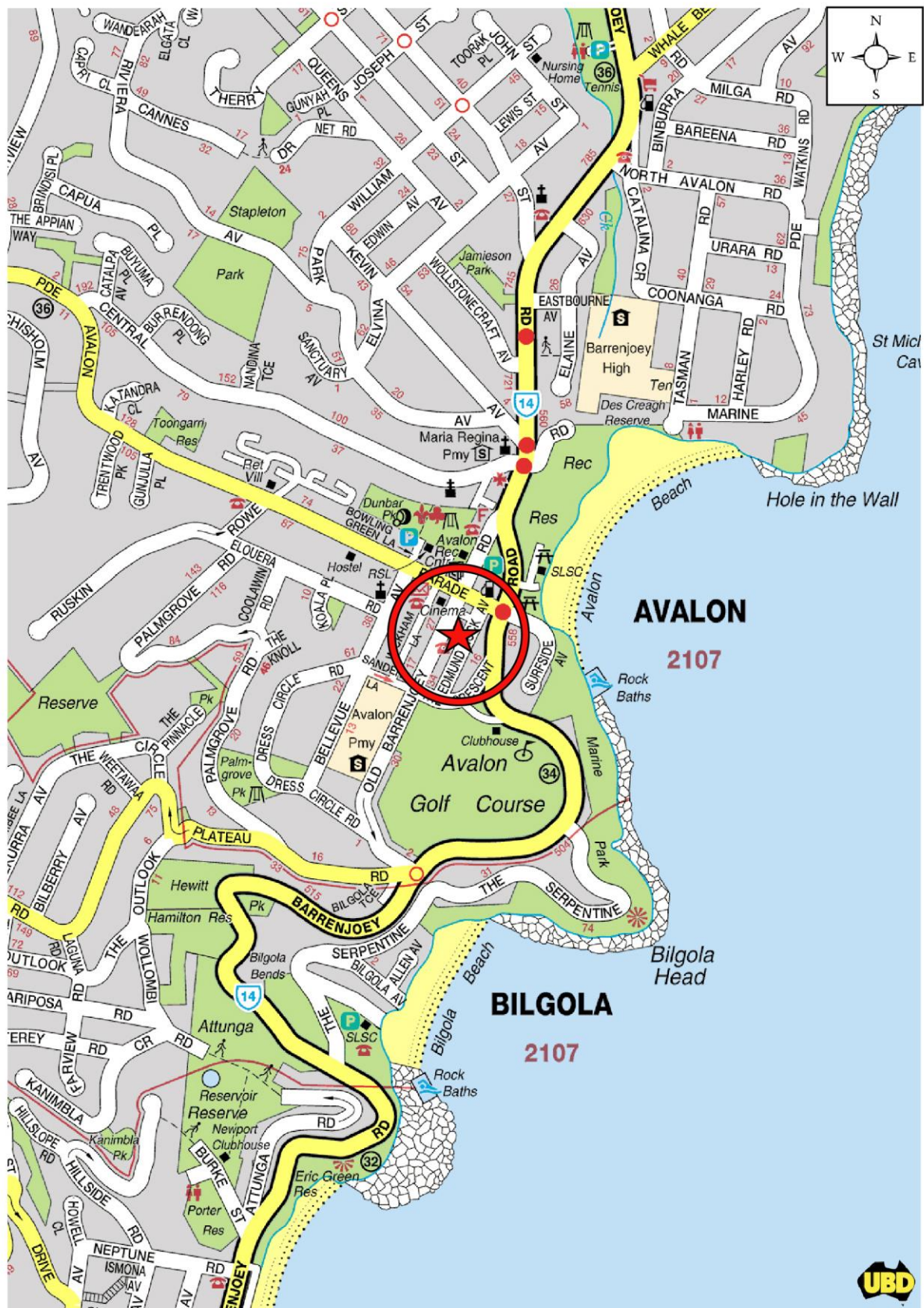
Thus the only additional parking requirements generated by the proposed development comprises the residential component of the development proposal.

Off-street parking for the two residential apartments is to be provided in an at-grade, undercroft car parking area at the rear of the site, in accordance with Council requirements.

The purpose of this report is to assess the traffic and parking implications of the development proposal and to that end this report:

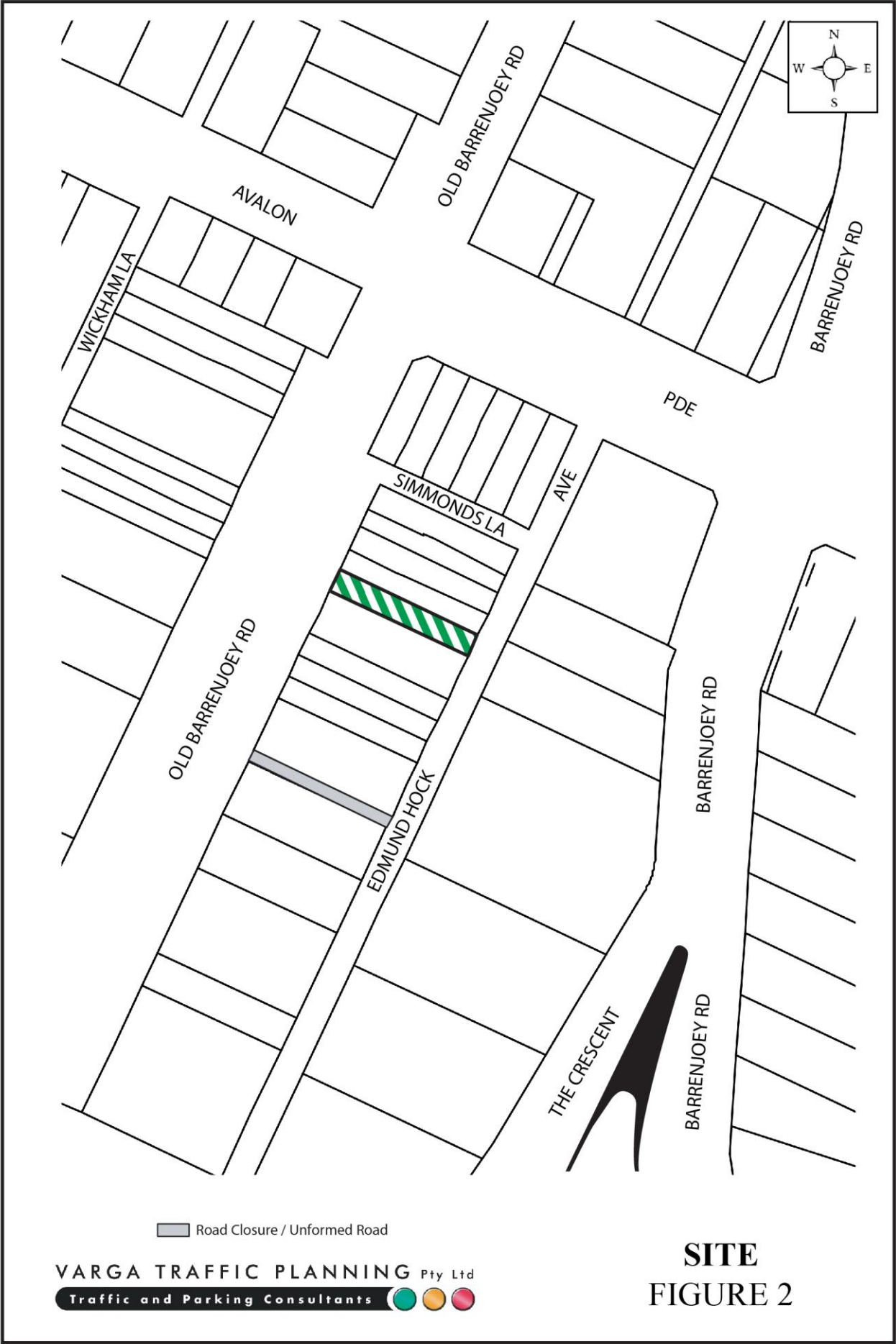
- describes the site and provides details of the development proposal
- reviews the road network in the vicinity of the site
- estimates the traffic generation potential of the development proposal
- assesses the traffic implications of the development proposal in terms of road network capacity
- reviews the geometric design features of the proposed car parking facilities for compliance with the relevant codes and standards

- assesses the adequacy and suitability of the quantum of off-street car parking provided on the site.



VARGA TRAFFIC PLANNING Pty Ltd
Traffic and Parking Consultants

LOCATION
FIGURE 1



2. PROPOSED DEVELOPMENT

Site

The subject site is located in the Avalon Beach Village, located on the eastern side of Old Barrenjoey Road, extending through to Edmund Hock Avenue, some 25 metres south of Simmonds Lane.

The site has street frontages approximately 6 metres in length to both Old Barrenjoey Road and Edmund Hock Avenue, and occupies an area of approximately 241.5m².

The subject site is currently occupied by a retail premises with a floor area of 156m².

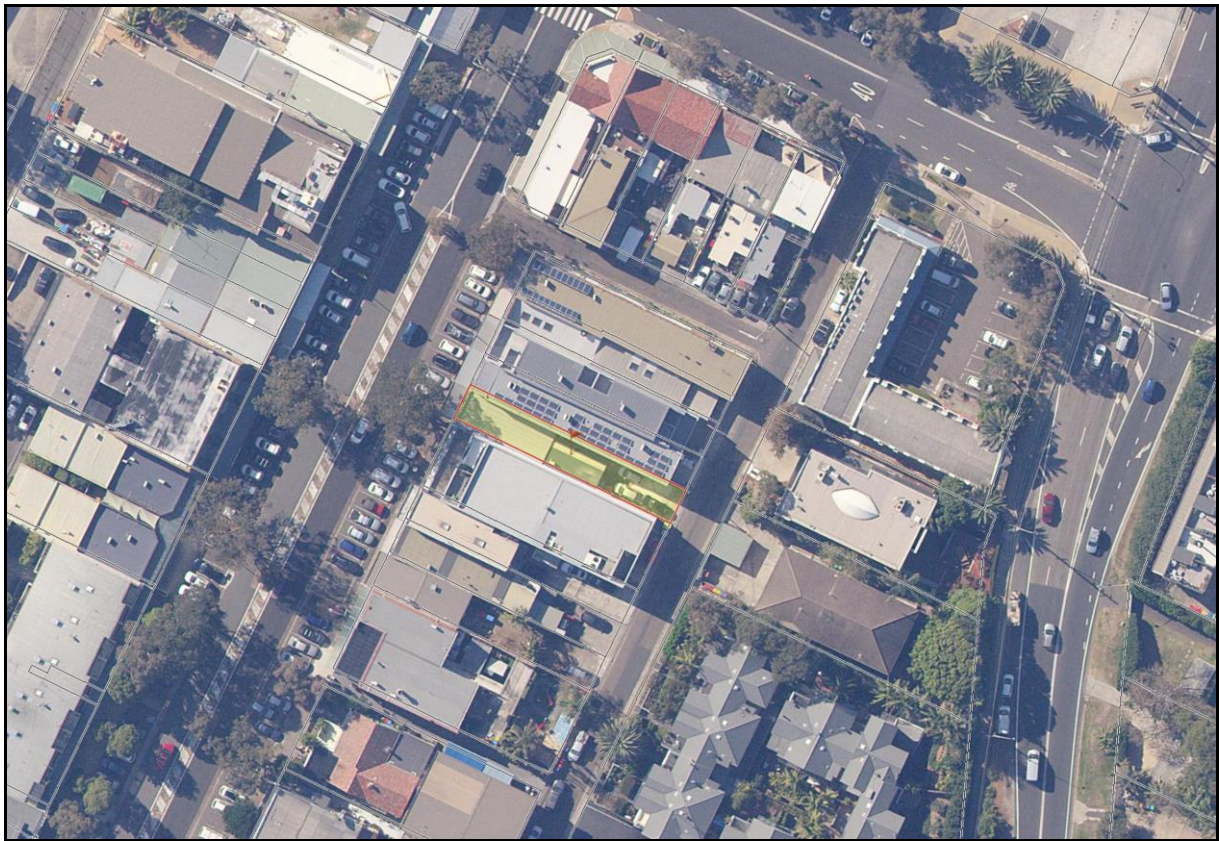
The previously approved development consent for the building did not specify any off-street parking requirements, however informal off-street car parking is currently available in the rear yard for 2 cars, accessed off Edmund Hock Avenue.

Although 1 or 2 cars are sometimes parked informally in the rear yard by staff, parking in this location is not suitable for customers of the existing retail shop who park in on-street parking spaces or in nearby public car parking areas.

It is noted in this regard that in the 1950s land was dedicated along the Old Barrenjoey Road frontage of the site for on-street parking (2.5 cars), and that the site therefore has a parking credit of 2.5 spaces.

Thus the existing uses of the site therefore have a parking shortfall of 2.7 spaces under the current DCP parking rates.

A recent aerial image of the site and the surrounding area is reproduced below:



Source: SIX Maps, NSW Spatial Services

Proposed Development

The proposed development will involve the partial demolition of the existing retail premises to facilitate the construction of a new mixed-use residential development with a ground floor retail component.

A total of 2 residential apartments are proposed as follows:

1-bedroom apartments:	1
3-bedroom apartments:	1
TOTAL APARTMENTS:	2

The proposed development reduces the size of the existing retail premises, from 156m² down to 90m², a reduction of 66m² in floor area.

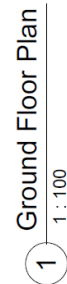
Thus the only additional parking requirements generated by the proposed development comprises the residential component of the development proposal.



Off-street parking is proposed for the residential component only, comprising 4 car spaces (a tandem pair of spaces to be allocated to each apartment) in accordance with Council requirements. Vehicular access to the off-street car parking facilities will be provided directly off Edmund Hock Avenue.

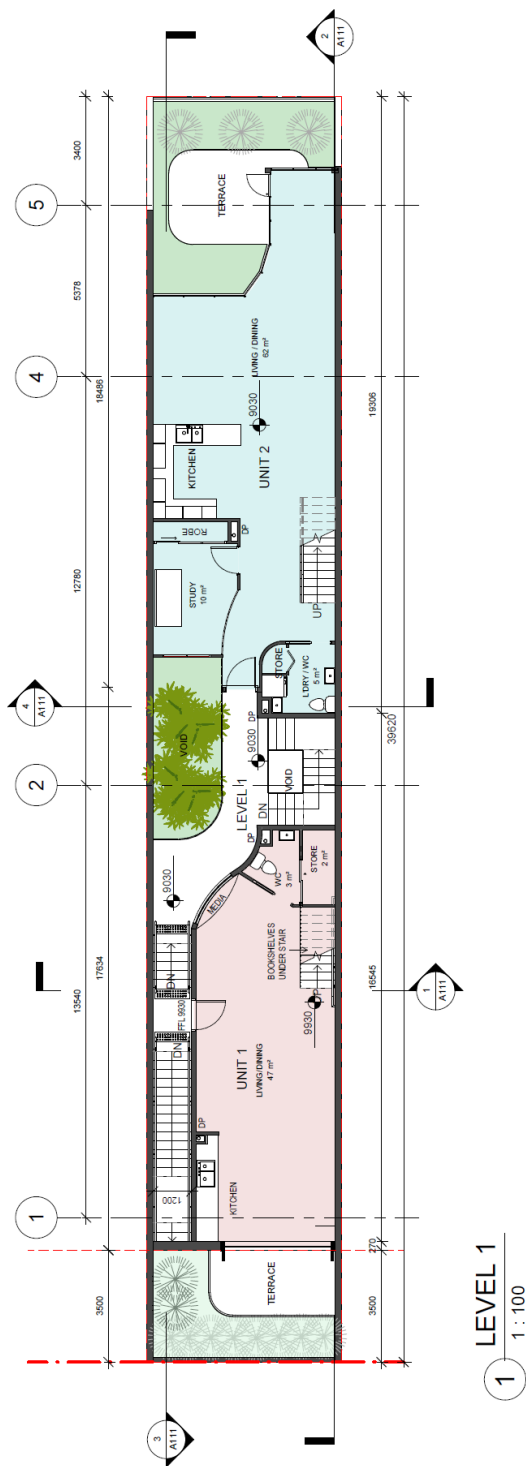
Garbage collection for the residential apartments is expected to be undertaken by Council's waste contractor with bins to be stored on site and brought out onto Edmund Hock Avenue on collection days as presently occurs.

Deliveries for the modest retail premises are expected to be minimal and will be satisfactorily undertaken by a variety of light commercial vehicles comprising "white vans" such as the *Hyundai iLoad* or similar B99 design vehicles, which can be accommodated in the on-street car spaces along the site frontage, as presently occurs.

Plans of the proposed development have been prepared by *AUDAA* and are reproduced in the following pages.



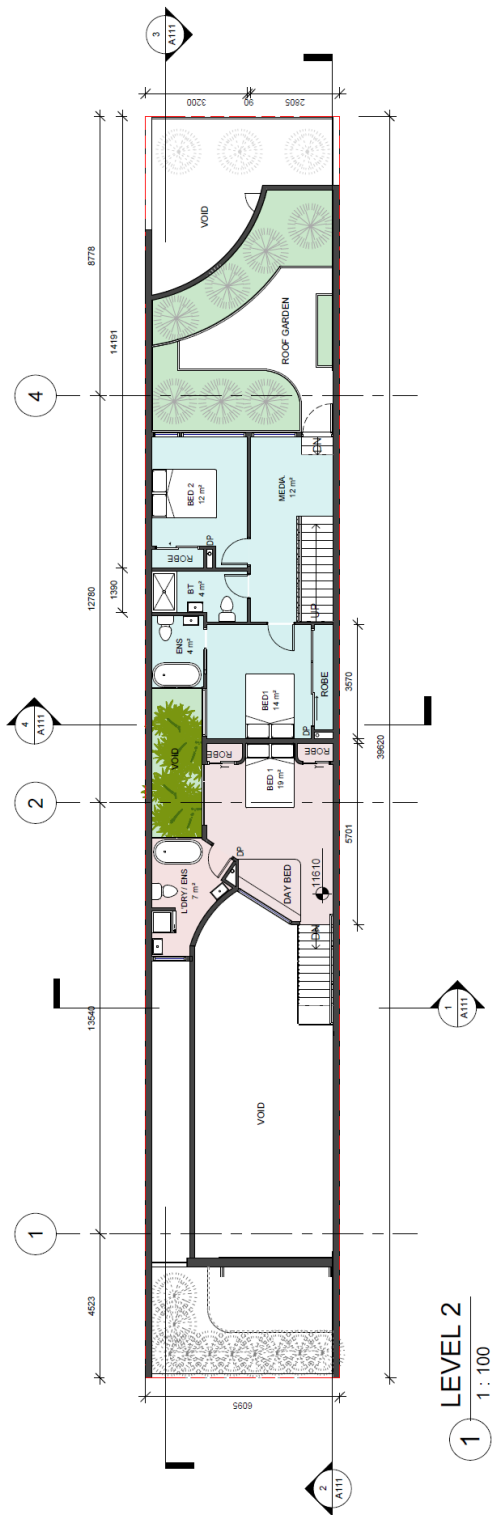
	COMMERCIAL & RESIDENTIAL DEVELOPMENT AT 62 OLD BARRENJOEY RD AVALON BEACH	ZA	Drawn by		A105	REV 01	Scale 1 : 100
		SG	Checked by				
		18009	Project number				
		08/07/2021	Date				
		GROUND					





	COMMERCIAL & RESIDENTIAL DEVELOPMENT AT 62 OLD BARENJOEY RD AVALON BEACH		ZA	Drawn by	 Nominated Architect: Shabaz Cohen - Registration No:4893	A106	REV 01
			SG	Checked by			
			18009	Project number			
			08/07/2021	Date			
			LEVEL 1				Scale
							1 : 100

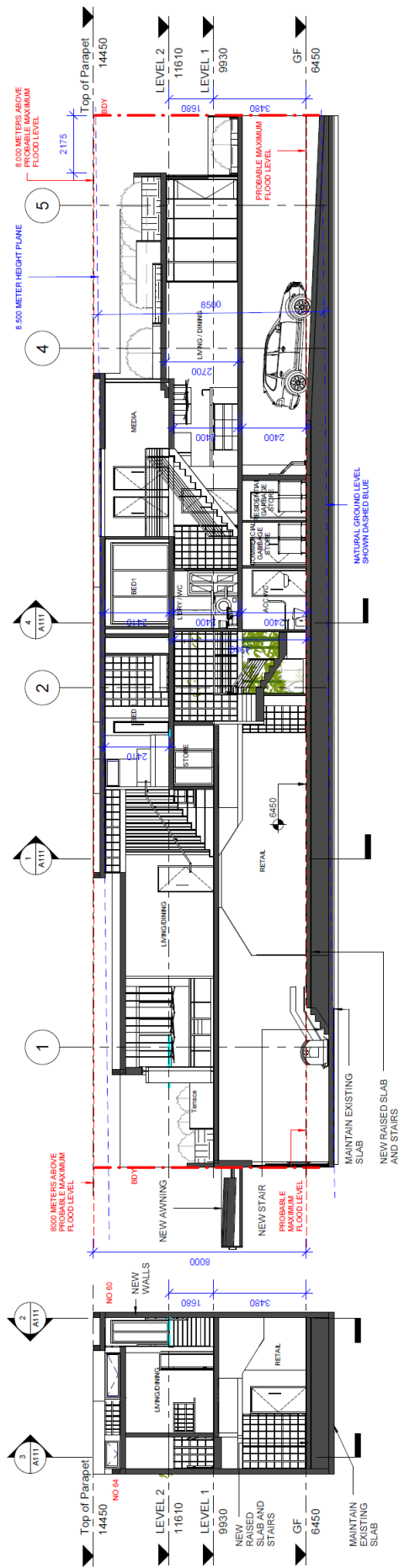
2021/8/10 13:11:23

2021/8/10 13:12:34



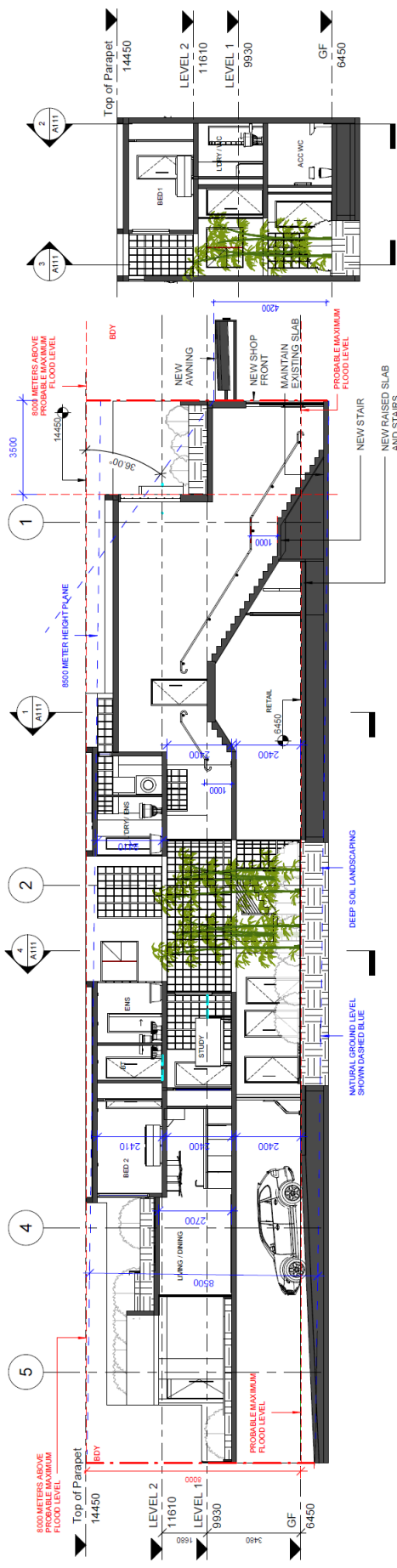
1 LEVEL 2
1 : 100

	COMMERCIAL & RESIDENTIAL DEVELOPMENT AT 62 OLD BARRENJOEY RD AVALON BEACH	ZA	Drawn by	 Notified Architect: Shaheer Gohar - Registration No.4893	LEVEL 2	A107	REV 01	Scale 1 : 100
		SG	Checked by					
		18009	Project number					
		08/07/2021	Date					



DETAILED SECTION 2

2 1:100




DETAILED SECTION 3

3 1:100

DETAILED SECTION 4

4 1:100

	COMMERCIAL & RESIDENTIAL DEVELOPMENT AT 62 OLD BARRENJOEY RD AVALON BEACH	ZA	Drawn by	 Nominated Architect: Shireen Eshwan - Registration No.4883	A111	REV 01	Scale 1 : 100
		SG	Checked by				
		18009	Project number				
		08/07/2021	Date				
DETAILED SECTIONS							

2021/8/10 13:15:44

3. TRAFFIC ASSESSMENT

Road Hierarchy

The road hierarchy allocated to the road network in the vicinity of the site by the Roads and Maritime Services is illustrated on Figure 3.

Barrenjoey Road is classified by the RMS as a *State Road* and provides the key north-south road link in the area, linking Palm Beach and Mona Vale. It typically carries one traffic lane in each direction and widens to provide additional lanes when it passes through Avalon Beach Village to accommodate turning traffic.

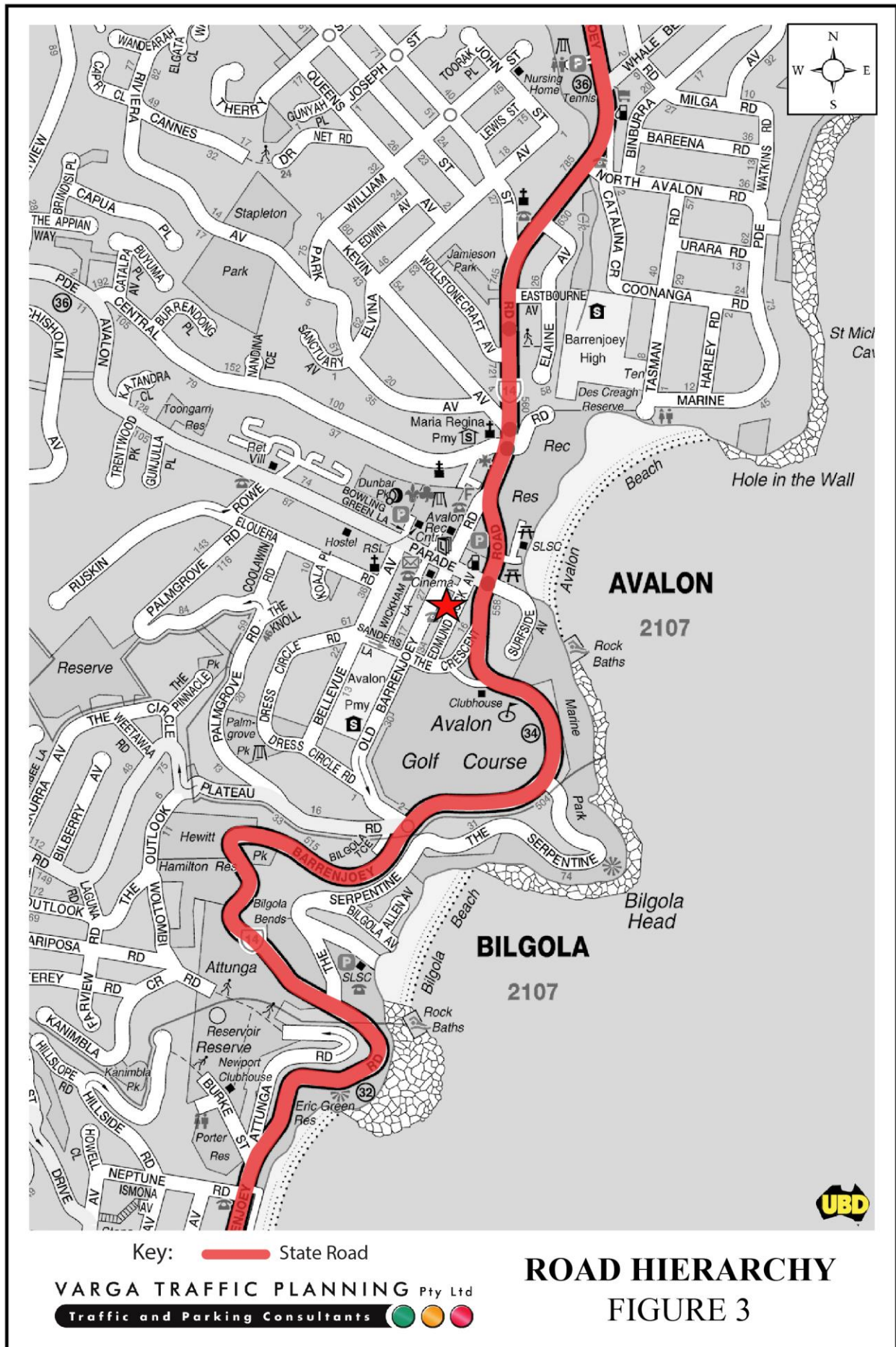
Old Barrenjoey Road is a local, unclassified road that is primarily used to provide pedestrian access to frontage properties. It typically carries one traffic lane in each direction with indented 90° degrees angled parking spaces provided along both sides of the road in the vicinity of the site.

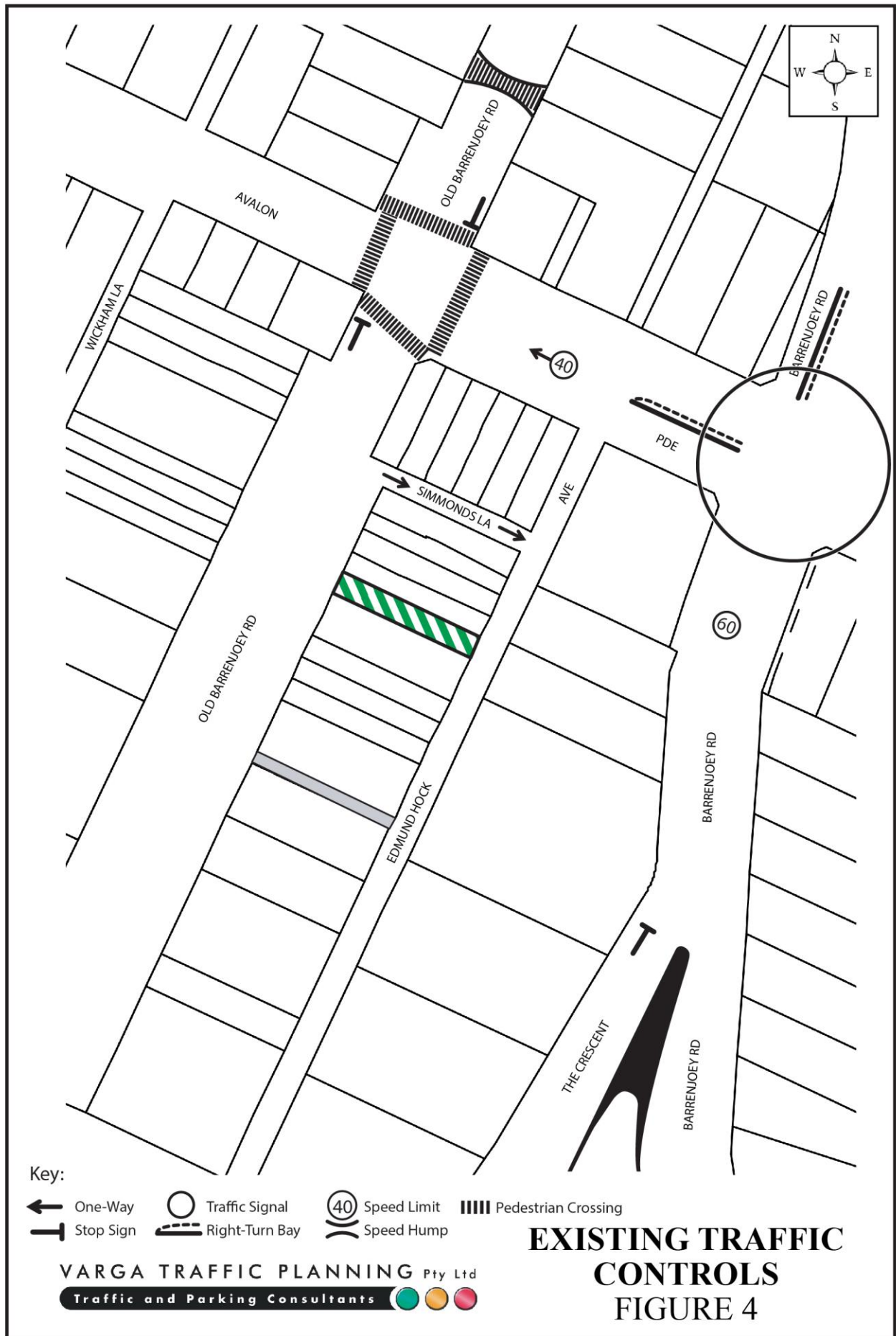
Edmund Hock Avenue is a rear service lane that is primarily used to provide vehicular access to properties fronting Old Barrenjoey Road. Kerbside parking is generally prohibited in the laneway due to its narrow width.

Existing Traffic Controls

The existing traffic controls which apply to the road network in the vicinity of the site are illustrated on Figure 4. Key features of those traffic controls are:

- a 60 km/h SPEED LIMIT which applies to Barrenjoey Road
- a 40 km/h SPEED LIMIT which applies to Avalon parade and all other local roads within the Avalon Beach Village
- TRAFFIC SIGNALS in Barrenjoey Road where it intersects with Avalon Road
- a ONE-WAY eastbound restriction in Simmonds Lane





- PEDESTRIAN ZEBRA CROSSING on all approaches at the Old Barrenjoey Road / Avalon Road intersection.

Projected Traffic Generation

The traffic implications of a development proposal primarily concern the effects of the *additional* traffic flows generated as a result of the development and its impact on the operational performance of the adjacent road network during the morning and afternoon commuter peak periods.

In this instance, the size of the retail premises is being reduced, and the only increase in the traffic generation potential of the site will be the traffic generated by the proposed residential apartments.

An indication of the traffic generation potential of the development proposal is provided by reference to the Roads and Maritime Services' publication *Guide to Traffic Generating Developments, Section 3 – Land Use Traffic Generation (October 2002)* and the updated traffic generation rates in the recently published RMS *Technical Direction* (TDT 2013/04a) document.

The RMS *Technical Direction* document specifies that it replaces those sections of the RMS *Guidelines* indicated, and must be followed when RMS is undertaken trip generation and / or parking demand assessments.

The RMS *Guidelines* and *Technical Direction* are based on extensive surveys of a wide range of land uses and nominate the following traffic generation rates which are applicable to the development proposal:

Medium Density Residential Flat Building

Up to 2 bedrooms:	0.4-0.5 peak hour vehicle trips per dwelling
3 bedrooms or more:	0.5-0.65 peak hour vehicle trips per dwelling

Application of the above traffic generation rates to the proposed residential component of the development proposal yields a traffic generation potential of 1 vehicle trip per hour during commuter peak periods.

That projected increase in traffic activity is minimal, and will clearly not have any unacceptable traffic implications in terms of road network capacity or traffic-related environmental effects.

4. PARKING IMPLICATIONS

Existing Kerbside Parking Restrictions

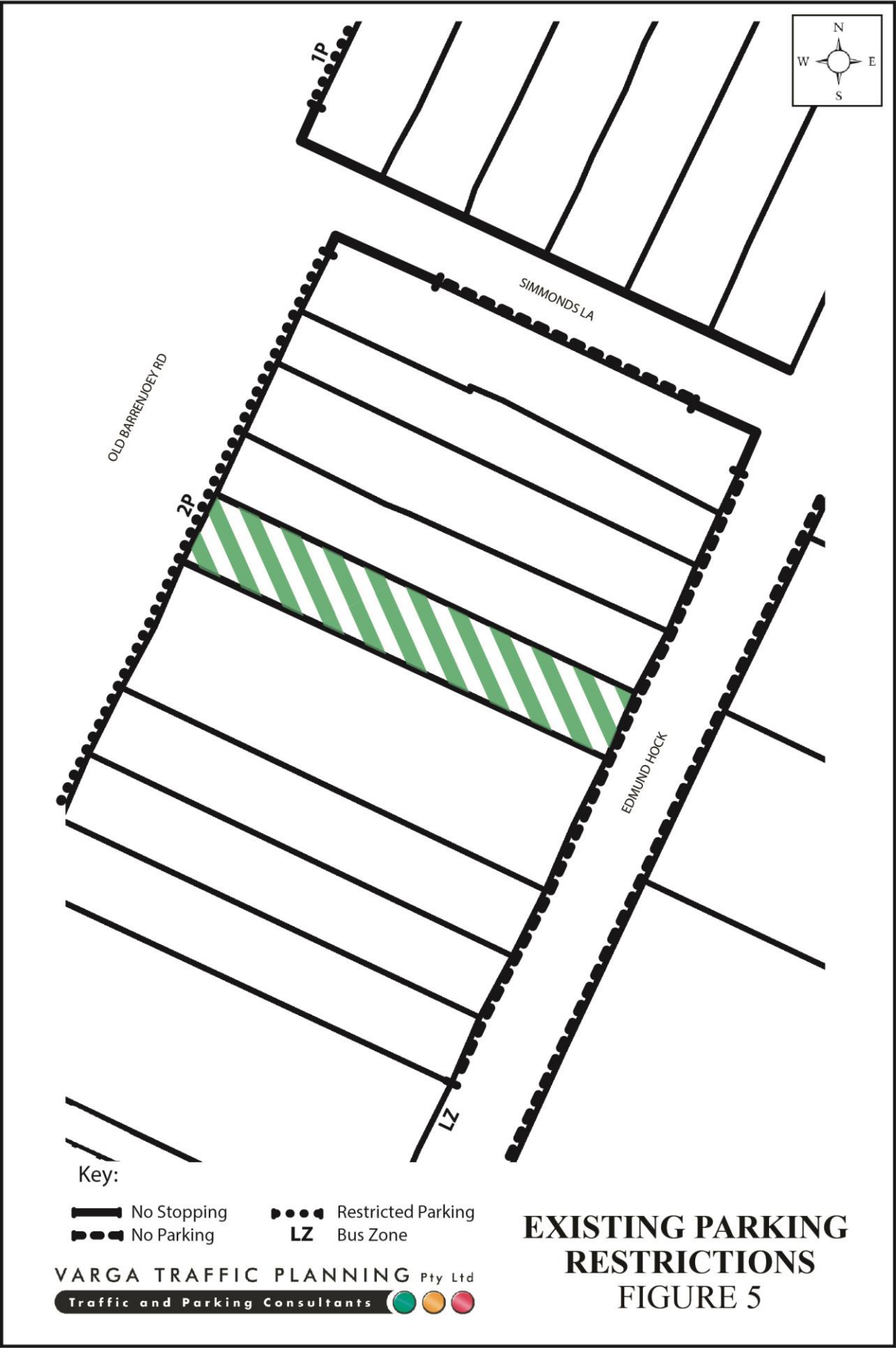
The existing kerbside parking restrictions which apply to the road network in the vicinity of the site are illustrated on Figure 5 and comprise:

- 1 HOUR / 2 HOUR PARKING restrictions in Old Barrenjoey Road, and
- NO PARKING / NO STOPPING restrictions in Simmonds Lane and Edmund Hock Avenue.

In addition to the above, *Avalon Beach Snapshot 2018* prepared by *Northern Beaches Council* identifies four separate off-street public parking areas within the Avalon Beach Village providing a total of 442 car spaces, plus a further 237 car spaces in on-street parking areas, an extract of the available public car parking is provided below:



Source: Avalon Beach Snapshot 2018, Northern Beaches Council



Off-Street Car Parking Provisions

The off-street car parking requirements applicable to the development proposal are specified in the *Pittwater 21 Development Control Plan, Section B6 Access and Parking* document in the following terms:

Multi Dwelling Housing, Residential Flat Buildings and Shop-Top Housing:	1 bedroom dwellings	1 space per dwelling
	2 or more bedroom dwellings	2 spaces per dwelling
	Separate visitor parking is to be provided at a rate of 1 space per 3 dwellings rounded up.	
Retail Premises	1 per 30m ² GLA	

Application of the above parking rates to the *proposed 90m² retail premises* yields an off-street car parking requirement or shortfall of 3 spaces. However, taking the parking credit of 2.5 spaces into account reduces the parking shortfall to just 0.5 spaces.

By way of comparison, the *existing 156m² retail premises* generates an existing off-street parking requirement of 5.2 spaces and, taking into account the parking credit of 2.5 spaces results in an existing parking shortfall of 2.7 spaces.

Thus the development proposes to *reduce* the previously approved shortfall in retail parking from 2.7 spaces to 0.5 spaces.

Application of the above car parking rates to the residential component of the development proposal yields an off-street car parking requirement of 3.7 spaces as set out below:

Residential (2 apartments):	3.0 spaces
Resident Visitors:	0.7 spaces
TOTAL:	3.7 spaces

The proposed development makes provision for a total of 4 car spaces in a 2 × 2 tandem arrangement, with a tandem pair of parking spaces to be allocated to each of the residential apartments, thereby satisfying Council's car parking code requirements for the two residential apartments.

It is not possible to accommodate Council's DCP requirement to provide 0.7 visitor parking spaces (1 space rounded-up) to serve the residential component of the proposed development. The residential visitor parking requirement must therefore be satisfied on-street or in one of the nearby public car parking areas. That arrangement is considered satisfactory and appropriate in this instance because:

- the visitor parking requirement of 0.7 spaces (1 space rounded-up) is very small
- residential visitor parking demands typically occur outside business hours when the demand for on-street parking is typically lower
- visitor parking demands typically occur on a short-term basis only.

The geometric design layout of the proposed car parking facilities has been designed to comply with the relevant requirements specified in the Standards Australia publication *Parking Facilities Part 1 - Off-Street Car Parking AS2890.1 - 2004* in respect of parking bay dimensions and manoeuvring requirements.

In the circumstances, it is considered that the proposed provision of 4 car parking spaces will satisfy the *actual* parking demands likely to be generated by the development proposal and it is therefore concluded that the proposed development will not have any unacceptable parking implications.